

WHAT IS CLAIMED IS:

1. A controller for use with a transceiver in a wireless communications network, comprising:

a sensing system configured to sense at least one characteristic associated with at least two channels of said wireless communications network;

a modification system configured to update channel information in a channel information table associated with said at least two channels based on said at least one characteristic; and

a selection system configured to select one of said at least two channels in accordance with said channel information.

2. The controller as recited in Claim 1 wherein said at least one characteristic is selected from the group comprising:

radio frequency (RF) energy associated with a signal on one of said at least two channels,

quality of service of a signal on one of said at least two channels, and

system configuration parameters entered by a user of said wireless communications network.

3. The controller as recited in Claim 1 wherein said
2 wireless communications network is a wireless local area network.

4. The controller as recited in Claim 1 wherein said
2 modification system is configured to update channel information in
3 a channel information table for each of said at least two channels.

5. The controller as recited in Claim 1 wherein said sensing
system is configured to periodically sense said at least one
characteristic associated with said at least two channels.

6. The controller as recited in Claim 1 wherein said at
least two channels are within a radio frequency band.

7. The controller as recited in Claim 1 wherein said
2 controller transmits a signal on said selected one of said at least
3 two channels using a direct sequence spread spectrum technology.

8. A method of controlling a signal transmission in a
2 wireless communications network, comprising:

3 sensing at least one characteristic associated with at least
4 two channels of said wireless communications network;

5 updating channel information in a channel information table
6 associated with said at least two channels based on said at least
one characteristic; and

7 selecting one of said at least two channels in accordance with
said channel information.

9. The method recited in Claim 8 wherein said sensing
2 includes sensing at least one characteristic selected from the
3 group comprising:

4 radio frequency (RF) energy associated with a signal on one of
5 said at least two channels,

6 quality of service of a signal on one of said at least two
7 channels, and

8 system configuration parameters entered by a user of said
9 wireless communications network.

10. The method recited in Claim 8 wherein said wireless
2 communications network is a wireless local area network.

11. The method recited in Claim 8 wherein said updating
2 includes updating channel information in a channel information
3 table for each of said at least two channels.

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12. The method recited in Claim 8 wherein said sensing
2 includes periodically sensing said at least one characteristic
3 associated with said at least two channels.

13. The method recited in Claim 8 wherein said sensing
includes sensing at least one characteristic associated with at
least two channels within a radio frequency band.

14. The method recited in Claim 8 wherein said controlling
2 further comprises transmitting a signal on said selected one of
3 said at least two channels using a direct sequence spread spectrum
4 technology.

15. A wireless communications device for use in a wireless
communication network, comprising:

an antenna;

a radio frequency filter;

a power source;

a transceiver that to transmits and receives wireless signals
having a controller, the controller, comprising:

a sensing system that senses at least one characteristic
associated with at least two channels of said wireless
communications network,

a modification system that updates channel information in
a channel information table associated with said at least two
channels based on said at least one characteristic, and

a selection system that selects one of said at least two
channels in accordance with said updated channel information.

16. The wireless communications device recited in Claim 15
wherein said at least one characteristic is selected from the group
comprising:

radio frequency (RF) energy associated with a signal on one of
said at least two channels,

quality of service of a signal on one of said at least two
channels, and

system configuration parameters entered by a user of said
wireless communications network.

17. The wireless communications device recited in Claim 15
wherein said wireless communications network is a wireless local
area network.

18. The wireless communications device recited in Claim 15
wherein said modification system updates channel information in a
channel information table for each of said at least two channels.

19. The wireless communications device recited in Claim 15
wherein said sensing system periodically senses said at least one
characteristic associated with said at least two channels.

20. The wireless communications device recited in Claim 15
2 wherein said at least two channels are within a radio frequency
3 band.

21. The wireless communications device recited in Claim 15
2 wherein said controller transmits a signal on said selected one of
3 said at least two channels using a direct sequence spread spectrum
4 technology.

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